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"PATENT"

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LIST OF PRIOR ART CITED BY APPLICANT

Attorney's Docket No. 230208

Applicants: Carmelo Batista and Salomon Alalu

Serial No. _____ Filing Date: _____

Group: _____

U.S. PATENT DOCUMENTS

| Document Number | Date | Name | Class/SubClass | Filing Date |
|-----------------|--------------------|----------------------|----------------|---------------|
| 5,452,676 | September 26, 1995 | Paul A. Fiore | 114/291 | July 5, 1994 |
| 5,983,823 | November 16, 1999 | Darris E. Allison | 114/271 | June 22, 1998 |
| 5,476,061 | December 19, 1995 | T. Robert Ackerbloom | 114/290 | Oct. 3, 1994 |

FOREIGN PATENT DOCUMENTS

| Document Number | Date | Country | Class/SubClass | Translation Yes No |
|-----------------|------|---------|----------------|-----------------------|
|-----------------|------|---------|----------------|-----------------------|

OTHER PRIOR ART (Incl. Author, Title, Date, Pertinent Pages, Etc.)

Examiner: _____

Date Considered: _____

DISCLOSURE DOCUMENT

Title: "LEVITATION AND STABILIZING HULL SYSTEM"

Inventors: Carmelo Batista and Salomon Alalu

Attorney Docket No. 230208

The present invention relates to levitation and stabilizing hull system for boats, and more particularly, to a system of steps, channels and strakes around the underside of the hull. Such combination results in a better performance and more stabilizing boat.

It is one of the main objects of the present invention to provide a system for boats with a combination of steps, channels and strakes around the underside of the hull resulting in an optimal stabilizing boat.

It is another object of this invention to provide a hull system for boats that allows to the users an optimal trim leverage and a stabilizer handling of the boat.

It is still another object of the present invention to provide a minimum transversal oscillation movement and a minimum lateral displacement of the boat while sailing.

It is yet another object of this invention to provide such a device that is inexpensive to manufacture and maintain while retaining its effectiveness.

Further objects of the invention will be brought out in the following part of the specification, wherein detailed description is for the purpose of fully disclosing the invention without placing limitations thereon.

Many designs for boat hulls have been developed in the past. None of them, however, includes such combination of steps, channels and strakes around the underside of the hull that permit the boat levitate while is kept

stabilized. In the present invention, the longitudinal angles of the strakes are in a disposition with respect to the steps that provide an optimal circulation of the air through the bottom.

None of the prior art includes a system that provides a stabilized and balanced hull, therefore, requiring fewer horsepower to propel the boat through the water. In fact, in the prior art there is not a boat able to keep a straight displacement line in the water such as the present invention. In the invention object of the present application, a channel next and in a parallel relationship with respect to the transversal steps allows elevated drive heights keeping the boat stabilized and with more trim leverage, which allows the user to sail at any given speed with optimum performance. Also, the present invention provides at least one pair of strikes in an angle with respect to the hull V-shape bottom surface and a horizontal longitudinal section next to each strike. Such combination provides an optimal stability and makes the displacement line of the boat is straight. Such combination also provides these advantages whether the boat is anchored or high-speed running.

Referring now to the drawings, where the present invention is generally referred to with numeral 10, it can be observed that it basically includes hull underside 20, steps 40 and 60 and strakes 70; 80; 90; 70'; 80' and 90', as seen in figure 1.

Hull underside 20 has a substantially V-shape cross-section and includes bow section 22, amidships section 24 and stern section 26, chine 27 and keel 28, as best seen in figure 2. Sections 22; 24 and 26 are defined by steps 40 and 60.

Steps 40 and 60 have channels 42 and 62, respectively, running adjacent and in a parallel relationship with respect to steps 40 and 60, as seen in figures 1 and 2. The water flowing along hull underside 20 goes to step 40 (and 60) and creates a current inside channel 42 (and 62) that lift the boat, as best seen in figure 3. In the prior art the water goes to the step and continue flowing to the next step, as best seen in figure 3a. Steps 40 and 60

have a V-shape open in the direction of the bow when they are seen from the bottom, as in figure 1. This shape is intended to trap the air coming from the sides of the boat and direct it into the keel 28 direction lifting the boat, as best seen in figure 4. Part of the air trapped in channel 42 (and 44) will escape into section 24 (and 26).

Strakes 70; 80; 70' and 80' extend longitudinally from bow to stern interrupted by steps 40 and 60. Strakes 90 and 90' extend longitudinally from step 60 to the bow interrupted by step 40. Strakes 70 and 70' define keel 28. In section 22 strakes 70; 80; 90; 70'; 80' and 90' run longitudinally into the bow to converge in keel 28. Strakes 70; 80; 70' and 80' have a substantially triangular cross-section with one of the sides coinciding with the surface of hull underside 20. Strakes 70; 80; 90; 70'; 80' and 90' have horizontal surfaces 74; 84; 94; 74'; 84' and 94', respectively, longitudinally and inwardly adjacent to strakes 70; 80; 90; 70'; 80' and 90'. The disposition of strakes 70; 80; 90; 70'; 80' and 90' provide stability to the boat even at high speed when the water level is under chine 27 and also make the boat running in a straight sailing line. Horizontal surfaces 74; 84; 94; 74'; 84' and 94' provide oscillation stability to the boat at any speed. The water flowing along hull underside 20 tends to go up and then hit surfaces 74; 84; 94; 74'; 84' making the boat lift while is not displaced transversally, as shown in figure 5. In the prior art shown in figure 5a, the strikes provide certain oscillation stability while the boat is anchored, but when the boat is sailing and the planning line is under the chine, there is not stability and also the boat is displaced to the sides making a S-shape sailing line. Also, in the present invention front ends 72; 82; 92; 72'; 82' and 92' of portion 24 and front ends 74; 84; 94; 74'; 84' and 94' of portion 26 have are not squares to facilitate the flowing of certain amount of air trapped in channels 42 and 62 to portions 24 and 26, respectively.

The foregoing description conveys the best understanding of the objectives and advantages of the present invention. Different embodiments may be made of the inventive concept of this invention. It is to be understood that all matter disclosed herein is to be interpreted merely as illustrative, and not in a limiting sense.

Disclosure Document Deposit Request

Mail to:

Box DD
Assistant Commissioner for Patents
Washington, DC 20231

Inventor(s): Carmelo Batista and Salomon Alalu

Title of Invention: LEVITATION AND STABILIZING HULL SYSTEM

Enclosed is a disclosure of the above-titled invention consisting of 3 sheets of description and 7 sheets of drawings. A check or money order in the amount of \$10.00 is enclosed to cover the fee (37 CFR 1.21(c)).

** SEE ENCLOSED
CHARGE AUTHORIZATION*

The undersigned, being a named inventor of the disclosed invention, requests that the enclosed papers be accepted under the Disclosure Document Program, and that they be preserved for a period of two years.

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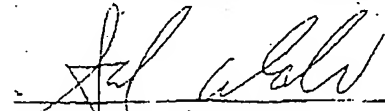
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